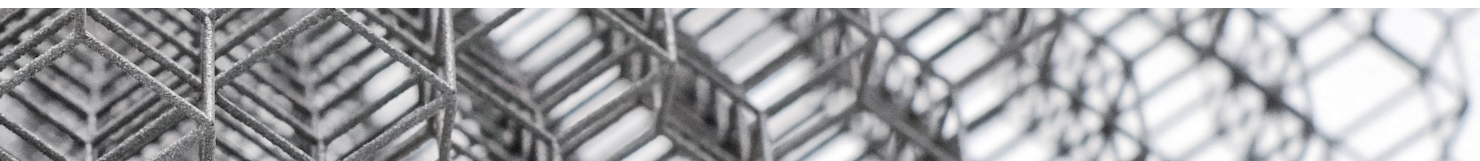


	Ti6Al4V Titanium	TA15 Titanium	AlSi10Mg Aluminum	18Ni300 Maraging Steel
Density (g/cm³)	≥4.40	≥4.45	≥2.65	≥8.00
Mechanical Properties (As built)				
Tensile Strength (MPa) <small>ISO6892-1</small>	1150±70	1160±50	430±30	1150±100
Yield Strength (MPa) <small>ISO6892-1</small>	1000±50	n/a	270±30	1050±100
Elongation after Fracture (%) <small>ISO6892-1</small>	8±2	8±2	3±1	12±3
Hardness HV <small>ISO6507-1</small> / HRC <small>ISO6508-1</small>	360±30 HV5/15	n/a	140±20 HV5/15	35±3HRC
Mechanical Properties ¹ (Heat treated)				
Tensile Strength (MPa) <small>ISO6892-1</small>	1050±70	1100±20	350±50	1950±100
Yield Strength (MPa) <small>ISO6892-1</small>	950±50	1040±20	240±30	1900±100
Elongation after Fracture (%) <small>ISO6892-1</small>	12±2	13±2	6±1	4±2
Hardness HV <small>ISO6507-1</small> / HRC <small>ISO6508-1</small>	330±30 HV5/15	n/a	75±20 HV5/15	53±3HRC

	IN718 Inconel	IN625 Inconel	GH3536 Inconel
Density (g/cm³)	≥8.18	≥8.40	≥8.30
Mechanical Properties (As built)			
Tensile Strength (MPa) <small>ISO6892-1</small>	1100±70	1000±70	820±70
Yield Strength (MPa) <small>ISO6892-1</small>	800±70	730±70	650±70
Elongation after Fracture (%) <small>ISO6892-1</small>	24±4	35±5	30±5
Hardness HV <small>ISO6507-1</small> / HRC <small>ISO6508-1</small>	300±20 HV5/15	270±10 HV5/15	270±5 HV5/15
Mechanical Properties ¹ (Heat treated)			
Tensile Strength (MPa) <small>ISO6892-1</small>	1350±100	1050±70	725±70
Yield Strength (MPa) <small>ISO6892-1</small>	n/a	700±70	330±70
Elongation after Fracture (%) <small>ISO6892-1</small>	16±4	35±5	43±5
Hardness HV <small>ISO6507-1</small> / HRC <small>ISO6508-1</small>	430±30 HV5/15	n/a	n/a

METAL LASER MELTING MATERIALS



	420 Stainless Steel	15-5PH Stainless Steel	17-4PH Stainless Steel	316L Stainless Steel
Density (g/cm³)	≥7.70	≥7.76	≥7.70	≥7.90
Mechanical Properties (As built)				
Tensile Strength (MPa) <small>ISO6892-1</small>	≥1100	1200±100	1050±100	637±50
Yield Strength (MPa) <small>ISO6892-1</small>	900±100	725±100	900±100	550±50
Elongation after Fracture (%) <small>ISO6892-1</small>	≥2	16±4	16±4	34±5
Hardness HV <small>ISO6507-1</small> / HRC <small>ISO6508-1</small>	48±3HRC	32-37HRC	n/a	215±10 HV5/15
Mechanical Properties ¹ (Heat treated)				
Tensile Strength (MPa) <small>ISO6892-1</small>	1000±100	1450±100	n/a	600±50
Yield Strength (MPa) <small>ISO6892-1</small>	n/a	1130±100	n/a	n/a
Elongation after Fracture (%) <small>ISO6892-1</small>	17±5	14±3	n/a	45±5
Hardness HV <small>ISO6507-1</small> / HRC <small>ISO6508-1</small>	32±4HRC	≥40HRC	n/a	190±10 HV5/15

	CoCrMo Cobalt Chrome	CoCrMoW Cobalt Chrome	CuSn10 Bronze
Density (g/cm³)	≥8.35	≥8.55	≥8.78
Mechanical Properties (As built)			
Tensile Strength (MPa) <small>ISO6892-1</small>	1150±100	1100±100	500±50
Yield Strength (MPa) <small>ISO6892-1</small>	900±100	900±100	380±40
Elongation after Fracture (%) <small>ISO6892-1</small>	10±2	10±2	30±10
Hardness HV <small>ISO6507-1</small> / HRC <small>ISO6508-1</small>	n/a	n/a	130±15 HV5/15
Mechanical Properties ¹ (Heat treated)			
Tensile Strength (MPa) <small>ISO6892-1</small>	1050±100	1100±100	n/a
Yield Strength (MPa) <small>ISO6892-1</small>	n/a	n/a	n/a
Elongation after Fracture (%) <small>ISO6892-1</small>	15±2	9±2	n/a
Hardness HV <small>ISO6507-1</small> / HRC <small>ISO6508-1</small>	n/a	n/a	n/a